**Water Pollution**

**Grade:** K ICT

**Subject:** Science

**Month:** January

**Teaching Point/Objective(s):** At the end of this lesson…**:**

* Students will learn to use their eyes and ears while listening to books being read.
* Students will be able to identify properties of clean water.
* Students will observe that water can change as foreign objects are added to it.
* Students will determine whether water can be cleaned.

**NYS Common Core Standards Addressed**:

* [W.K.8](http://corecommonstandards.com/kindergarten-standards/english-language-arts-standards/w-k-8-common-core-worksheets-and-activities/)
* [SL.K.1](http://corecommonstandards.com/kindergarten-standards/english-language-arts-standards/sl-k-1-common-core-worksheets-and-activities/), [SL.K.2](http://corecommonstandards.com/kindergarten-standards/english-language-arts-standards/sl-k-2-common-core-worksheets-and-activities/)
* S1.1, S1.2, S1.3, S2.1, S.2.2, S3.3

**Introduction:**

Open by reading a book titled, *Watch over Our Water* by Lisa Bullard. Afterwards discuss with students, “What does clean water look like?” “What are things that can pollute our water?”

* Brainstorm ideas on chart page split in half by topic question.

**Materials needed:**

* 4 tubs
* 1 bucket
* Tongs
* Cups
* Pollution materials:
  + Coffee grounds
  + Oil
  + Grass/leaves
  + Tea bags
  + Banana peel
  + Plastic/zip lock
  + Paper
* Filter materials:
  + strainer
  + cotton balls
  + cheesecloth
  + papertowel

**Pollution Activity**

1. Prepare tubs and “pollutants” on back table before lesson
2. Split class into 4 groups (5 students each)
3. Have students gather around the back table
4. Each group has one tub, one set of the pollutants, and different ways to filter the water
5. Each student chooses a pollutant and puts it in the tub of water
6. While students are adding pollutants, ask them questions about the pollutants.
   1. Have you seen these things before? Are they changing the water? (i.e. color, texture, etc.) How are the pollutants changing the water?
7. After pollutants have been added, students attempt to make the water as clean as it was before the pollutants were added. Note how students are trying to clean the water with the filter materials.

**Discussion:** Is the water clean? Why isn’t it? Is it as easy to clean the water, as it was to pollute it? Why or why not? What did you learn from this activity?

**Differentiation:** Classroom will be set-up with limited distractions both auditory and visual.Student can be given a fidget toy during the read aloud. Supplies for lesson are pre-arranged before students sit down. A step by step visual chart on each activity will be used for students to stay focused and on task, as well as lessening anxiety about what is coming next. Teacher will begin with large group instruction, but will also provide small group instruction, to avoid task avoidance. During the activity the teacher will provide verbal and gestural prompts as needed to help the child complete the activity. Appropriate social behaviors will be immediately reinforced and praised during activity for all students.

**Assessment/Evaluation**

*What are things that can make water dirty?* Students will use a graphic organizer with 4 boxes. They will sketch four things that pollute water, either from the book or their hands on experience.